

**REMARKS**

Applicant has carefully reviewed and considered the Office Action mailed on October 6, 2003 and the references cited therewith. Claims 1-4 have been cancelled and the remaining claims 5-15 and 19-21 have been amended as set forth above. It is noted that only Claim 5 has been revised to better set forth the patentable features of the present invention. The changes to the claims other than Claim 5, i.e., Claims 6-15 and 19-21 are editorial in nature and are not considered to change the substantive scope of the claims in any way.

Applicant gratefully acknowledges the allowance of Claims 11-15 and 19-21. Because of the cancellation of Claims 1-4, the grounds for the rejection of these claims is believed to be moot. The remaining portion of the Remarks is respectfully directed to the rejection of Claims 5-10.

**Claim Rejections-35 USC§ 102**

Claim 5 stands rejected under 35 U.S.C. 102 (b) as being anticipated by Welker (U.S. Patent 5,578,770). Upon review, it is respectfully pointed out that Welker only teaches the creation of a variable volume chamber, not the creation of variable pressures within the volumes. Welker teaches that the variable volume is used to move a gas into and out of the chamber. During the process, “[t]he pressure of the gas sample from the supply line 12 is controlled to substantially 10 pounds per square inch.” See col. 5, lines 34-36. During the process set forth in Welker, the pressure must be maintained as atmospheric. “If the pressure is not atmospheric, the user opens the purge valve 42 to dump the sample.” See col. 6, lines 16, 17. Clearly, Welker does not suggest, much less teach the use of two selectable volumes capable of achieving pressure change within the volume.

In comparison, Claim 5 as currently amended, describes a test apparatus capable of achieving two, different pressures for the purpose of comparing the changed pressure

with historical, preoperative calibrations to determine in situ the health of the pressure transducer. Welker does not and cannot measure such pressure changes and, clearly teaches in the opposite that the pressure should not be allowed to vary from atmospheric. For these reasons, it is believed that claim 5 is patentable over Welker.

**Claim Rejections –35 USC § 103**

Claims 6 and 7 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Welker in view of Geiger (U.S. Patent 4, 730, 789). Welker is applied as discussed above. Geiger is cited as showing that it is obvious to use an electromagnet for moving a piston a predetermined displacement. Upon review, it is clear that Geiger does not teach the creation of variable volume and variable pressure chambers as stated in the claims. For that reason, no combination of Welker and Geiger could fairly suggest the structure described in Claims 5-10.

Claims 8-10 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Welker in view of Kluth (U.S. Patent 5,582,064). Welker has been applied as discussed above. Kluth is cited as disclosing a secondary tube (25) attached to a primary tube (1) and that it would therefore be obvious to modify Welker to “include a secondary tube attached generally perpendicular to a primary tube as taught by Kluth”. Upon review, it is clear that Kluth is not directed to a transducer assembly capable of creating variable volume and variable pressure chambers as needed to perform in situ testing of the transducer. It is not believed that any fair combination of Welker and Kluth would achieve the structure and performance of the presently claimed invention.

**CONCLUSION**

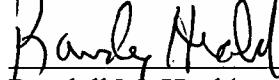
Claims 5-15 and 19-21 remain the present application. In view of the above remarks, Applicant respectfully submits that all of the claims are in condition for allowance and requests reconsideration of the application and allowance of all the remaining claims.

The Examiner is invited to contact Applicants' Representatives at direct dial (321) 867-7214 if there are any questions regarding this Response or if prosecution of this application may be assisted thereby.

It is further requested that a one month's extension of time be granted and that the required fee be charged to DEPOSIT ACCOUNT NO. 14-0116.

Date: Sum 14/2004

Respectfully submitted,



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